



National Aeronautics and Space Administration  
Goddard Space Flight Center

Wallops Flight Facility, Wallops Island, Virginia

# Inside Wallops

Volume XX-01

Number: 29

August 27, 2001

## ***NASA Satellite, University of Maryland and U.S. Forest Service Provide Rapid Response to Wildfires***

U.S. firefighters and land managers are using the most modern NASA-satellite data to combat wildfires. NASA's Terra satellite provides a view of fires across the entire United States.

The effort is a collaboration between NASA, NOAA, the University of Maryland and the USDA Forest Service.

The Terra satellite beams daily images of western U.S. wildfires to NASA within a few hours of the time that it passes over the region. These images, showing the locations of active fires, are transmitted to the Forest Service.



*MODIS image over Washington state.*

When the Forest Service's direct broadcast receiving stations are completed in October, transmission time will be reduced to minutes. Images from Terra's Moderate-resolution Imaging Spectroradiometer (MODIS) instrument will become a regular part of the Forest Service's fire monitoring tool kit.

"NASA remains deeply committed to working cooperatively with its sister agencies to monitor and combat wildfires across the nation. Our investment in the Terra Earth Observing System is starting to pay tremendous dividends to the American taxpayer," said Ghassem Asrar, NASA's Associate Administrator for the Office of Earth Science.

In order to use MODIS data to tackle forest fires, a complex communications network is maintained between NASA, the University of Maryland and the Forest Service. The three institutions are integrated under the Rapid Response Project. This program was created in response to the 2000 fire season, with its extensive wildfires in Idaho and Montana.

By October 2001, the Forest Service will have the capability to produce their own MODIS fire images within minutes of a Terra overpass. "The

Active Fire Maps offer the potential for understanding the 'big picture' when working on resource allocations decisions," said Alice Forbes, Deputy Director for Forest Service Fire and Aviation Operations at the National Interagency Fire Center (NIFC).

The University and NASA developed all of the needed software, which will be installed at the Forest Service's data receiving station. The Forest Service developed corresponding software that creates the Active Fire Maps from the Terra data using standard mapping techniques.

The Forest Service's Remote Sensing Applications Center (RSAC) in Salt Lake City, Utah, provides development, support and application of remote sensing technologies and techniques.

Currently, the Forest Service is building a MODIS processing center in Salt Lake City to generate near-real-time images of western wildfires. However, the Forest Service will still receive imagery of the eastern U.S. from the University and NASA.

Keith Lannom, the Operations Program Leader at RSAC, stated, "The University of Maryland sends MODIS images and active fire location information daily to RSAC staff who are overlaying state boundaries and topographical features on the images to best determine where fires are occurring. These maps show current active fire areas in near-real-time on the Internet."

## ***Newest Environmental Satellite Snaps First Image***

The nation's newest environmental satellite has sent back its first image from space, according to NASA and the National Oceanic and Atmospheric Administration (NOAA).

GOES-12, a geostationary weather satellite that takes images of clouds, measures temperature, reads the amount of moisture in the atmosphere, and monitors space weather, sent back a clear, crisp image from its vantage point 22,300 miles in space. GOES-12 will be stored in orbit and will replace either GOES-8 or GOES-10 as needed.

"The image quality is excellent," said Martin A. Davis, the NASA GOES Program Manager at Goddard Space Flight Center.

## ***"Countdown to Wildflowers"***

### ***Take Our Daughters to Work Day in Space!***

Take Our Daughters to Work Day will be expanding into space thanks to the efforts of the Women of Wallops.

Among the activities from the April 2001 daughter's day, students toured the Space Experiment Module (SEM) integration facility and prepared vials of wildflower seeds as a SEM opportunity.

The experiment has been accepted to fly on SEM-15, now scheduled for flight on Space Shuttle, STS-108, in November 2001.

The purpose of the experiment is to determine the effects of micro-gravity and space travel on wildflower seeds. Students are also keeping a control group on earth.

After the return of the Space Shuttle Endeavor, STS-108, the experiment, "Countdown to Wildflowers", will be returned to Wallops. Both sets of seeds will then be planted to compare their germination rates, as well as compare their plants, flowers, and seeds.

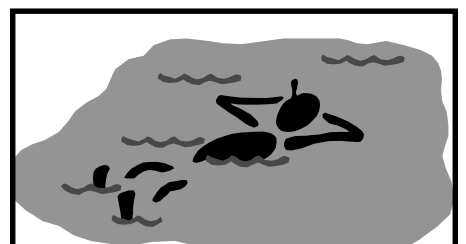
The experiment may be de-integrated as an activity for Daughter's Day 2002.

The NASA Goddard/Wallops Flight Facility's Women of Wallops (WOW) Federal Women's Program (FWP) Advisory Committee co-sponsored the annual Take Our Daughters to Work Day (TODTWD) activity on Thursday, April 26, 2001.

The event was co-sponsored by NASA, Navy and NOAA at Wallops Island, VA.

More information on the Federal Women's Program at Wallops or the Space Experiment Module Program is available at the following web sites.

<http://www.wff.nasa.gov/~FWP/>  
<http://www.wff.nasa.gov/sem/>



**Due to the Labor Day holiday, the next edition of *Inside Wallops* will be September 10.**

## 20 Year Service Award



PAO Digital Photo

Arnold Torres, (left), Director of Suborbital and Special Orbital Projects, recently presented Bruce Underwood, Policy and Business Relations Office, a certificate in recognition of 20 years of service to NASA Wallops Flight Facility.

### Fend off forgetfulness



#### Say your A-B-C's

Memory blocks are normal at any age, but they do seem to become more frequent with age. This may be due to the complex network of memory connections you've built up during your lifetime. Chances are the information you want is right there in your brain somewhere. You just need to find it. If you can't remember a name, try going down the alphabet. Often getting the first letter is enough to trigger the rest.

#### Play the name game

The first time you are introduced to someone, repeat their name back to them. For example: "My name is Betty Flowers". "Hello, Betty Flowers, nice to meet you. Are you related to the North Carolina Flowers?"

#### Make a connection

Continually exercising your mind through reading, puzzles, debates or any other mentally stimulating activity



helps keep your brain vibrant. Studies in aging animals have shown that cognitive stimulation causes new connections to develop between neurons. The same may happen in older adults. Remember if you don't use it, you might lose it.

#### Keep it short

It may take longer to learn new information as we grow older, but if you repeatedly practice you can learn it the same, if not better than when you were younger. Timing the practice sessions is key. Short study sessions alternating with breaks work much better than the cramming we did in high school.

#### Make an association

If you need to take medicine every night before going to bed, do it after you brush your teeth, not at a certain time. Soon you'll automatically reach for your medicine the moment you finish brushing.

### From FEDweek August 22 Issue

#### F Fund Continues to Lead

In July, the bond (F) fund of the Thrift Savings Plan continued its recent pattern of being the leading fund in terms of both short-term and 12-month returns, gaining 2.22 percent during the month for a 12-month return of 12.78 percent. The government securities (G) fund gained 0.48 percent for a 5.81 percent gain over the last 12 months. The large-cap stock (C) fund lost 0.98 percent, the small and mid-cap S fund lost 4.13 percent and the international stock (I) fund lost 1.79 percent, for 12-month losses of 14.3, 15.56 and 22.07 percent, respectively. Twelve-month returns for the S and I funds, which launched in May, are based on the performance of their underlying Barclay's investment funds over that time.

### NASA Visitor Center Events Scheduled for September

#### September 1 — "Model Rocket Launch"

A model rocket launch will be held at 1 p.m. Models of various rockets will be launched. Model rocketeers are invited to bring their own rockets and launch them. The launch will be canceled if it is raining or winds exceed 18 mph.

#### September 2 — "Bike Tour of the Main Base"

Learn about Wallops Flight Facility as you ride your bike on the NASA Main Base. Participants must bring their own bicycles, and wear a helmet. The tour starts at 3 p.m., is 3 miles long and takes approximately an hour. Registration is at the NASA Visitor Center. The tour will be cancelled if it is raining.

#### September 15 — "Buoyancy, Ballooning and Boats"

NASA's scientific balloons use the principles of buoyancy to carry science experiments to the fringes of space. This 30-minute program explores why some things float and others don't. Participants will make aluminum foil boats and load them with pennies to test the buoyant force.

The Visitor Center will be open daily through Labor Day, September 3. Beginning September 4, the Visitor Center is open from 10 a.m. to 4 p.m., Thursday through Monday and is closed on Tuesday and Wednesday. For further information, visit: <http://www.wff.nasa.gov/vc/> or call x2298.

### Upcoming Training

#### Networking Options for the New Digital Copiers

September 11, 2001

10:30 a.m. - Noon

Building E-2

For additional information, contact: Theresa Wirth, Code 293, x66-4422 or visit the Technical Information Services Branch home page: <http://tisb.gsfc.nasa.gov>

### Tickets Available at the Exchange Store

#### Renaissance Festival Tickets

\$12.00 Adults — \$5.50 Children

Step back in time, to a somewhat whimsical time, and enjoy the cultural experience of the Renaissance Festival. The annual festival is held in



Crownsville, Md., just west of Annapolis off Route 450, on Saturday and Sunday from August 25 through October 21.

Wallops Exchange and Morale Association members may register for a free drawing for four Renaissance Festival tickets at the Exchange Store in Building E-2 from Monday, August 27 through Friday, August 31. The drawing will be held at 1 p.m. on Friday.

For further information visit: <http://www.rennfest.com/mrf/>

### Virginia State Fair

September 27 through October 7

Coupons for \$5 off the regular ticket price are available at the Exchange. The State Fair is located off I-64 or I-95 at the Richmond Raceway Complex. Information is available at: <http://www.statefair.com>

*Inside Wallops* is an official publication of Goddard Space Flight Center and is published by the Wallops Office of Public Affairs, Extension 1584, in the interest of Wallops employees.

Editor  
Printing

Betty Flowers  
Printing Management Office

<http://www.wff.nasa.gov>